

Tue May 22 14:08:16 2001

IESNA:LM-63-1995
 Photopia 1.5.0.20 PHOTOMETRIC REPORT
 PROJECT: Best
 OPTIONS:
 Spawning 1 rays for each reaction.
 Writing 250 rays to a DXF file.
 Random number generator seed: 8.
 Tracing 30 reflections.
 Stop tracing ray at 2.0% of initial magnitude.
 Tracing 499968 initial lamp rays.
 Photometric test distance of 20.00 feet.

LUMENS EXITING SYSTEM:

Lumens (%)	Reflection
127 (4.7%)	0
121 (4.5%)	1
184 (6.8%)	2
171 (6.3%)	3
152 (5.6%)	4
127 (4.7%)	5
118 (4.4%)	6
99 (3.7%)	7
89 (3.3%)	8
78 (2.9%)	9
68 (2.5%)	10
60 (2.2%)	11
53 (2.0%)	12
47 (1.8%)	13
42 (1.6%)	14
38 (1.4%)	15
33 (1.3%)	16
29 (1.1%)	17
25 (1.0%)	18
23 (0.9%)	19
21 (0.8%)	20
18 (0.7%)	21
16 (0.6%)	22
14 (0.5%)	23
13 (0.5%)	24
11 (0.4%)	25
10 (0.4%)	26
9 (0.4%)	27
8 (0.3%)	28
7 (0.3%)	29
6 (0.2%)	30
1832 (67.9%)	Total

LUMENS ABSORBED BY SYSTEM:

Lumens (%)	Layer Name
0 (0.0%)	LAMP-F14T5A
313 (11.6%)	LAMP-F14T51
43 (1.6%)	LAMP-F14T52
116 (4.3%)	REFL-MASK
122 (4.6%)	TRAN-CAVITY
28 (1.1%)	REFL-SHOLDER1
59 (2.2%)	REFL-FAN2
8 (0.3%)	REFL-ENDS
73 (2.7%)	REFL-FAN1
0 (0.0%)	REFL-MASK_BLOK
0 (0.0%)	REFL-FAN_BLOK
12 (0.5%)	REFL-SHOLDER_VERTICAL
8 (0.3%)	REFL-SHOL_DIF
786 (29.1%)	Total

Lumens (%)	Material
356 (13.2%)	PHOSGLAS
133 (4.9%)	PERPE980
174 (6.4%)	ALMIRO02
0 (0.0%)	ZERO0000
122 (4.6%)	GORE0025
786 (29.1%)	Total

Best - (Photometry) - Page 2 of 4

Number of Lamps: 2 Lumens per Lamp: 1350
Ballast Factor: 1.00 Ballast-Lamp Photometric Factor: 1.00
Luminaire Width: 0.7500 Length: 3.4777 Height: 0.2654
Photometry Type: C Units: feet

Candela Distribution:

0.00 22.50 45.00 67.50 90.00

0.00	15.4	15.4	15.4	15.4	15.4
5.00	19.8	16.5	20.6	18.3	19.8
10.00	18.4	20.1	17.5	17.4	15.8
15.00	15.9	18.2	19.9	19.3	16.8
20.00	17.9	20.6	20.4	17.1	18.9
25.00	17.9	17.6	15.7	17.5	20.1
30.00	16.3	16.8	18.2	19.1	17.0
35.00	16.0	18.4	15.0	19.2	15.6
40.00	14.1	15.2	16.6	14.5	14.7
45.00	13.4	13.8	13.7	14.4	16.5
50.00	13.4	13.4	13.6	13.4	13.3
55.00	13.6	11.5	11.0	12.8	12.0
60.00	10.8	10.6	11.6	10.5	12.3
65.00	8.80	10.3	8.92	9.75	9.68
70.00	7.74	7.93	9.14	8.28	7.74
75.00	7.28	7.15	8.65	7.75	7.04
80.00	4.14	6.82	7.94	6.74	6.20
85.00	3.76	6.04	7.12	6.18	4.11
90.00	16.2	51.1	67.7	81.4	85.8
95.00	43.5	288	433	453	468
100.00	44.8	270	643	833	881
105.00	54.0	183	588	832	925
110.00	59.2	129	474	757	828
115.00	65.8	105	322	626	750
120.00	81.3	105	215	432	534
125.00	85.5	103	161	295	363
130.00	94.9	104	144	193	232
135.00	106	106	141	166	174
140.00	107	109	137	157	159
145.00	123	110	132	151	153
150.00	133	108	133	142	144
155.00	137	108	125	128	139
160.00	140	111	119	128	123
165.00	138	119	118	122	120
170.00	158	130	120	120	115
175.00	163	141	135	129	120
180.00	143	143	143	143	143

Zonal Lumens		Lumens
Cone	Between	Lumens
0.0	0.0- 2.5	0.09
5.0	2.5- 7.5	0.90
10.0	7.5- 12.5	1.72
15.0	12.5- 17.5	2.62
20.0	17.5- 22.5	3.59
25.0	22.5- 27.5	4.04
30.0	27.5- 32.5	4.85
35.0	32.5- 37.5	5.37
40.0	37.5- 42.5	5.35
45.0	42.5- 47.5	5.51
50.0	47.5- 52.5	5.64
55.0	52.5- 57.5	5.40
60.0	57.5- 62.5	5.25
65.0	62.5- 67.5	4.74
70.0	67.5- 72.5	4.26
75.0	72.5- 77.5	4.06
80.0	77.5- 82.5	3.60
85.0	82.5- 87.5	3.18
90.0	87.5- 92.5	34.41
95.0	92.5- 97.5	195.18
100.0	97.5-102.5	298.01
105.0	102.5-107.5	276.89
110.0	107.5-112.5	232.29
115.0	112.5-117.5	181.50
120.0	117.5-122.5	125.76
125.0	122.5-127.5	87.94
130.0	127.5-132.5	63.33
135.0	132.5-137.5	53.66
140.0	137.5-142.5	47.17
145.0	142.5-147.5	41.79
150.0	147.5-152.5	35.75
155.0	152.5-157.5	28.89
160.0	157.5-162.5	22.93
165.0	162.5-167.5	17.27
170.0	167.5-172.5	12.04
175.0	172.5-177.5	6.51
180.0	177.5-180.0	0.86

Zonal Lumen Summary

Zone	Lumens	#Lamp	#Ptxt
0- 30	15	0.6	0.8
0- 40	26	1.0	1.4
0- 60	48	1.8	2.6
0- 90	87	3.2	4.8
90-120	1265	46.8	69.0
90-130	1447	53.6	79.0
90-150	1639	60.7	89.5
90-180	1745	64.6	95.2
0-180	1832	67.9	100.0

Total Lumininaire Optical Efficiency = 67.9%

Luminaire Spacing Criterion:

0 deg 90 deg
1.51 1.51

Average Luminaire Luminance (cd/sqmeter):

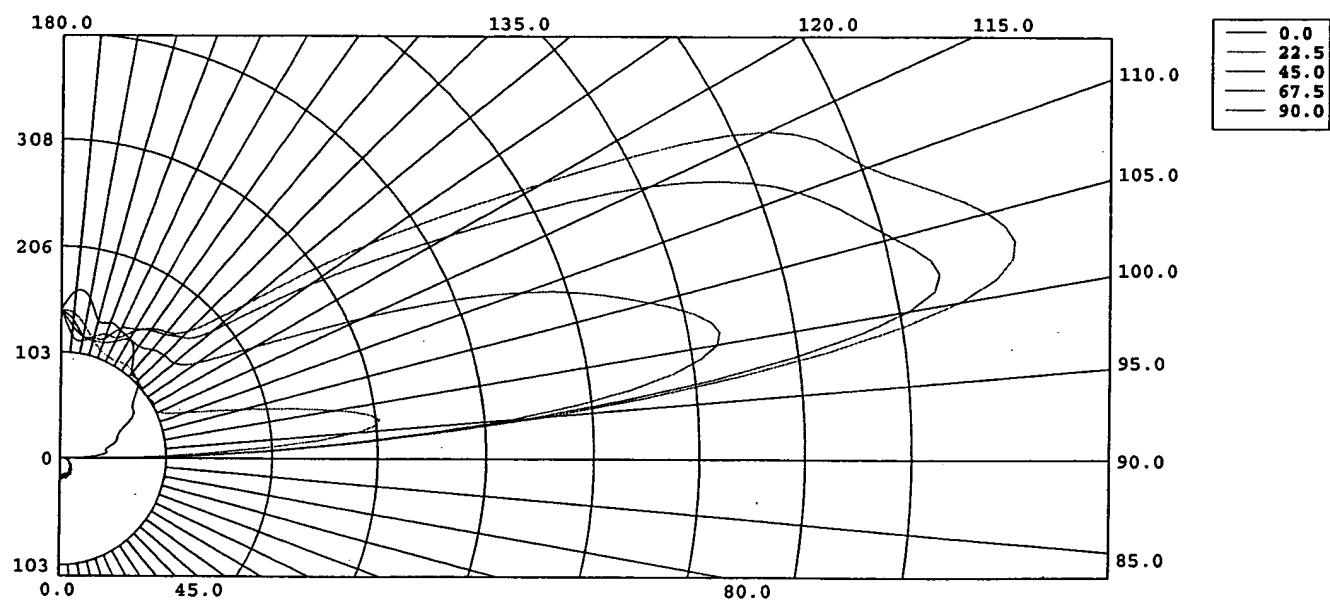
	0	45	90
0	63.76	63.76	63.76
45	72.50	61.17	71.21
50	78.56	63.85	60.15
55	88.04	55.22	57.21
60	78.66	62.65	63.14
65	73.85	52.71	53.74
70	77.20	60.07	47.35
75	90.35	64.59	48.37
80	68.67	69.24	49.00
85	95.09	75.30	38.57

Coefficients of Utilization - Zonal Cavity Method:

pfc = 0.20

	.8	.7	.5	.3	.1	0	
pcc	.7	.5	.3	.1	.7	.5	
pw	.7	.5	.3	.1	.5	.3	
RCR	0	65 65 65 65	56 56 56 56	39 39 39	23 23 23	9 9 9	2
1	59 56 54 52	51 49 47 45	34 33 31	20 20 19	8 7 7	2	
2	54 49 45 42	46 42 39 36	29 27 26	18 16 16	7 6 6	1	
3	49 43 38 35	42 37 33 30	26 23 21	15 14 13	6 5 5	1	
4	45 38 33 29	38 33 28 25	23 20 18	14 12 11	5 4 4	1	
5	41 33 28 24	35 29 25 21	20 17 15	12 10 9	4 4 3	0	
6	37 30 25 21	32 26 21 18	18 15 13	11 9 8	4 3 3	0	
7	34 27 22 18	29 23 19 16	16 13 11	10 8 7	3 3 2	0	
8	32 24 19 16	27 21 16 14	14 12 10	9 7 6	3 3 2	0	
9	29 22 17 14	25 19 15 12	13 10 8	8 6 5	3 2 2	0	
10	27 20 15 12	23 17 13 10	12 9 7	7 6 4	3 2 2	0	

Best - (Candela Distribution Polar Plot)



Best - (Candela Distribution XY Plot)

